

Abstract

[0065] A MMIC (microwave monolithic integrated circuit) driver amplifier having a zig-zag RF signal flow and method for the same is provided. A smaller die size and higher output gain are realized with the improved amplification stage geometry provided herein. In particular, the stages are configured in a "stacked" topology permitting a zig-zag RF signal flow through the stages. Additionally, the DC bias circuitry may be centralized and adjacent stages may share vias. In particular, transistors, such as FETs (field effect transistors) are displaced from a conventional FET geometry with alternating FETs being rotated in opposite directions. The inputs (gate pads) and outputs (drain pads) of two adjacent FETs may be "shared." In a shared input configuration, a compensation network may be coupled to the input. The improved amplifier configuration provides a multi-sectional configuration wherein one section may be the mirrored image of another. In a two section amplifier, the amplifier appears to be "folded."